

REMARKS

Favorable reconsideration of the subject application as amended above is respectfully requested in view of the comments below.

Claims 1-34 are pending in the present application. Claims 1-17, 20-24 and 26-33 have been canceled herein. Accordingly, claims 18, 19, 25 and 34 are presented for examination on the merits.

Claims 18, 19, 25, and 34 have been amended to more particularly define the claimed polypeptides. No new matter is added by these amendments to the claims.

I. Rejection of Claim 34 Under 35 U.S.C § 101

It is respectfully submitted that the amendment to claim 34 renders this ground of rejection moot.

II. Rejection of Claims 18, 19, 25 and 34 Under 35 U.S.C § 112, First Paragraph (Written Description)

Claims 18, 19, 25 and 34 are rejected under 35 U.S.C § 112, first paragraph because the specification allegedly fails to provide written description of the claimed invention. The Examiner states that the specification contains insufficient information to support the genus encompassed by the claims because the species within the genus are highly variant.

This rejection is respectfully traversed as follows.

The specification provides written description of the claimed chimeric polypeptides, vaccines and their use. The specification teaches how to generate chimeric polypeptides and specifically discloses fragments of BVH3 and BVH-11 polypeptides that have at least about 95% sequence identity with BVH-3 or BVH-11, the two components of the chimeric polypeptides. The specification also demonstrates that such polypeptides elicit an immune response *in vivo*. As such, the written description provides sufficient support for the claimed invention.

Accordingly, the rejection of claims 18, 19, 25 and 34 under 35 U.S.C. § 112, first paragraph is respectfully traversed.

III. Rejection of Claims 18, 19, 25 and 34 Under 35 U.S.C § 112, First

Paragraph (Enablement)

Claims 18, 19, 25 and 34 are rejected under 35 U.S.C § 112, first paragraph. The Examiner asserts that the specification does not enable a person of ordinary skill in the art to make and use the invention commensurate in scope the claims.

This rejection is respectfully traversed as follows.

The specification provides amino acid sequence, methods of generating the claimed chimeric polypeptides, methods for generating the claimed vaccines and methods of their use. The specification also provides data to evidence the effectiveness of the claimed vaccine. As such, the specification provides sufficient guidance to the skilled practitioner to make and use the claimed invention.

Accordingly, the rejection of claims 18, 19, 25 and 34 under 35 U.S.C. §112, first paragraph is respectfully traversed.

IV. Rejection of Claim 18 Under 35 U.S.C § 112, Second Paragraph

It is respectfully submitted that the amendment to claim 18 renders the formal grounds of rejection moot.

V. Rejection of Claims 18, 19, 25 and 34 Under 35 U.S.C § 102(b)

Claims 18, 19, 25 and 34 are rejected under 35 U.S.C § 102(b) as being anticipated by Kunsch et al. The Examiner states that Kunsch et al. teach epitope containing peptides, polypeptides and vaccines that anticipate the claimed invention.

Applicants respectfully disagree with the Examiner's conclusion.

The cited reference does not teach a chimeric polypeptide, and specifically does not teach a chimeric polypeptide having the amino acid sequence of SEQ ID No. 332. Nor does the cited reference teach chimeric polypeptides having at least about 95% sequence identity with SEQ ID NO. 322. The cited prior art reference merely teaches a non-immunogenic fragment of the BVH3 and discloses BVH11, but there is no disclosure of generating chimeric polypeptides of BVH-3 and BVH-11. In fact, the cited prior art discloses a failed attempt to isolate the full length "BVH-3 gene and hence, fails to disclose the full length BVH-3 polypeptide, disclosing instead, a polypeptide having less than 95% sequence similarity to BVH-3. As such, the cited reference does not anticipate the claimed invention.

Accordingly, the rejection of claims 18, 19, 25 and 34 under 35 U.S.C. § 102(b) is respectfully traversed.

It is respectfully submitted that the present application, as amended above, is in condition for allowance, an early notification thereof being earnestly

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solicited. If any issues remain outstanding, the Examiner is respectfully requested to contact the undersigned attorney so that prosecution of this application may be expedited.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 500417 and please credit any excess fees to such deposit account.

Respectfully submitted,

~~MCDERMOTT, WILL & EMERY~~



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